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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,831	03/04/2002	Toshio Anzai	Q68496	2878

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EXAMINER

PATEL, NITIN C

ART UNIT PAPER NUMBER

2116

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/086,831

Applicant(s)

ANZAI, TOSHIO

Examiner

Nitin C. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/17/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This is in responsive to amendment filed on 15 June 2005.
2. Claims 17 – 18 have been added new.
3. Claims 1 – 18 are presented for examination.

### ***Claim Objections***

4. Claim 15 is objected to because of the following informalities:
5. In the claim 15, the acronym "CPU" in line 3 on page 7, should be fully defined at its first occurrence. Appropriate correction is required.

### ***Drawings***

6. The replacement drawings for fig. 5, amended with legend "related art" were received on 15 June 2005. These drawings are accepted.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 17, and 18 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Bowles et al. [hereinafter as Bowles], US Patent 6,535,797 B1.
8. As to claim 17, Bowles discloses a power system management [monitoring and control] system [electric distribution system fig. 1] comprising:

a. an equipment control apparatus [16, substation] controlling facility equipment [18, feeder][col. 3, lines 59 – 67, col. 5, lines 4 – 10];

b. a monitoring control apparatus [36, 46, monitoring device/station] acquiring information about the equipment control apparatus [16, substation], where the monitoring control apparatus [46] is remote [for remote monitoring] from the equipment control apparatus [16, substation] [42, IED, Intelligent Electric Device] [col. 6, lines 33 – 40];

c. a change control apparatus [42, IED, Intelligent Electric Device] changing settings [operating parameters] of the equipment control apparatus [16];

d. a web communication network [12, communication network] transmitting data to and from the monitoring control apparatus [36] and the equipment control apparatus [16]; and

e. a dedicated [a particular line for transmitting control signals] communication network [44, a particular associated line] transmitting data [transmitting control signals] to and from [communicating] the equipment control apparatus [16] and the change control apparatus [42] [col. 5, lines 48 – 54],

wherein the change control apparatus [42] is an electrical terminal located in at least one of a product supply-side base [electric distribution] that supplies at least one of said facility equipment [18, feeder] and said equipment control apparatus [16], and a power supply-side base [electric distribution], and

wherein the monitoring control apparatus [36] is an electrical terminal remote from the equipment control apparatus [16] [col. 3, lines 25 – 67, col. 4, lines 42 – 64, col. 5, lines 1 – 59, col. 6, lines 33 – 62].

9. As to claim 18, Bowles discloses a power system management [fig. 1] including the equipment control apparatus [16 substation] with a processing circuit [22], a common memory [26, memory, fig. 1] storing information [to store information is inherent to memory] about the equipment control apparatus being provided to the monitoring control apparatus, and a dedicated [a particular line for transmitting control signals] communication network [44, a particular associated line] transmitting data [transmitting control signals] to and from [communicating] the equipment control apparatus [16] and the change control apparatus [42] [col. 5, lines 48 – 54] therefore, he teaches a protocol of communication including confirmation too.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
10. Claims 1 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowles et al. [hereinafter as Bowles], US Patent 6,535,797 B1, and further in view of Bjorklund, US Patent application US 2002/0107615 A1.

As to claims 1, 7, Bowles teaches a electric distribution [power system management] system and method of controlling and monitoring [fig. 1], an equipment control apparatus [16, substation] to control the facility equipment [18, feeder] comprising a power system [power distribution system]; and monitoring control apparatus [36, 46, monitoring device/station] to obtain internal information [operating parameters] about equipment control apparatus [16] via a Web communication [12, communication network], and a dedicated [a particular line for transmitting control signals] communication network [44, a particular associated line] transmitting data [transmitting control signals] to and from [communicating] the equipment control apparatus [16] [col. 5, lines 48 – 54] and the change control apparatus [42] [col. 2, lines 1 – 67, col. 3, lines 25 – 67, col. 4, lines 42 – 64, col. 5, lines 1 – 59, col. 6, lines 33 – 62].

However, Bowles does not teach that a communication system of higher security than the Web communication for monitoring is provided to change a function of equipment control [to change operating parameter settings].

Bjorklund teaches a substation control system for transmission and distribution of electrical energy [fig. 1 – 4] for control, regulation, and protection with monitoring control system by measuring and condition states in real time and facilitates functions to

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optimize operational conditions with set values from a remote control center via network bridges [42] and firewalls [43] to provide secured communication [para 0018 – 0020 on page 2, para 0100 – 0110 on page 5 – 6].

It would have been obvious to one of ordinary skill in art, having the teachings of Bowles and Bjorklund before him at the time of invention was made, to modify the a particular associated line [44] of electric distribution system and method of monitoring and controlling as disclosed by Bowles to provide a higher security with secured communication using a bridge or firewall as taught by Bjorklund, in order to obtain electric substation for transmission and distribution of electric energy with a flexibility, drastic reduction in cabling, improved performance [para 0015 on page 1, para 0024 – 0037 on page 2].

11. As to claims 2, and 8, Bowles teaches different communication lines [44, a particular associated line] [col. 5, lines 42 – 50] for the secure communication [as it is associated with a particular device] and the Web communication [12, communication network] of monitoring control apparatus [36/46 monitoring device/station] [col. 4, lines 42 – 50, col. 6, lines 33 – 40, fig. 1].

12. As to claims 3, and 9, Bjorklund discloses a monitoring, control, diagnosis and remote operation of substation from anywhere by an operator using a portable device such as a laptop computer, PDA [personal digital assistant], by connecting it to the LAN [local area network] via suitable communication link [47] to the firewall [42] [para 0109 – 0110, on page 5 – 6], therefore he teaches a confirmatory communication [login and password authentication] too.

13. As to claims 4, and 10, Bowles teaches the power system management and method of monitoring and controlling including to change the function of equipment control apparatus [16, substation] from outside via a communication line [44, a particular associated line] [col. 5, lines 42 – 50, fig. 1] for secure communication [as it is associated with a particular device] by changing operating parameters.

14. As to claim 5, Bowles teaches the power system management and method of monitoring and controlling including to change the function of equipment control apparatus [16, substation] from at least one of a product supply-side base [42, IED, Intelligent Electric Device by changing operational parameters] that supplies at least one of facility equipment [18, feeder] and equipment control apparatus [16], and power supply-side [transmission and distribution][col. 3, lines 43 – 67, col. 6, lines 1 – 40].

15. As to claims 6, and 15, Bowles discloses a power system management [fig. 1] including the equipment control apparatus [16 substation] with a CPU [22, processing circuit], an internal memory [26, memory, fig. 1] with IED for changing operational parameter settings [col. 5, lines 42 – 50, fig. 1], therefore he teaches to access it with secured communication [44, a particular associated line] and a common memory [RAM, inherent to processing circuit, 22] to which access [it is inherent to network access of computer] is performed via Web communication [12, communication network].

16. As to claim 10, Bowles discloses a power system management [fig. 1] including changing a function [by changing an operational parameters] of the equipment control apparatus [16 substation] exerting an effect at least on operation [electrical distribution]



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of the power system is changed via communication system [col. 3, lines 59 – 67, col. 4, lines 1 – 65, col. 5, lines 60 – 67, col. 6, lines 1 – 40].

17. As to claims 11 – 14, Bowles discloses a power system management [fig. 1] including the equipment control apparatus [16 substation] include a plurality of controllable devices in the form of IED and configured as a circuit breaker, a relay, a capacitor bank, or a switch therefore, he teaches a function of changing the relay setting values and setting the switch OFF and ON, too [col. 5, lines 4 – 10].

18. As to claim 16, Bowles discloses a power system management [fig. 1] including the equipment control apparatus [16 substation] with a CPU [22, processing circuit], memory [26, memory, fig. 1] and remote monitoring and control therefore, he teaches read only memory [ROM] only for reading with respect to the access via Web [12, communication network] communication too.

19. **Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

20. **Prior Art not relied upon:** Please refer to the references listed in attached PTO-892, which, are not relied upon for claim rejection since these references are relevant to the claimed invention.

21. Applicant's arguments with respect to claims 1 – 18, have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin C. Patel whose telephone number is 571-272-3675. The examiner can normally be reached on 6:45 am - 5:15 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on 571-272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nitin C. Patel  
June 28, 2005

  
**LYNNE H. BROWNE**  
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